

as one or more of the following cough, fever ($>37.5^{\circ}\text{C}/99.5^{\circ}\text{F}$), shortness of breath, sore throat, and a positive SARS-CoV-2 rtPCR test 2.) COVID-19 Hospitalization was defined as confirmed hospitalization due to COVID-19, and 3.) Symptoms Severity of COVID-19 was defined as symptoms severity of COVID-19 using Brescia-COVID Respiratory Severity Scale (BCRSS).

[0303] All subjects were tested and found to be positive for SARS-CoV-2 infection. All subjects were monitored for one month after the initiation of the therapy. 4 of 75 subjects in the abiraterone arm were admitted to the hospital after their first visit. The patients average BCRSS score was 1.8. 15 of 75 subjects in the standard care group were admitted to the hospital with an average BCRSS score of 4.7.

Example 16

[0304] A controlled study was conducted on 90 male patients with average age of 51 years old. Patients were diagnosed with SARS-CoV-2 infection but were showing relatively mild symptoms. Patients were divided into one of two arms. The treatment arm was prescribed nilutamide (300 mg) orally once daily at the start of the trial, the control arm received standard care. Patients were instructed to go home but return to the hospital if symptoms became worse. Efficacy parameters were defined as 1.) COVID-19 Diagnosis: COVID-19 positive diagnosis was defined as subject exhibiting symptoms of acute respiratory infection, defined as one or more of the following cough, fever ($>37.5^{\circ}\text{C}/99.5^{\circ}\text{F}$), shortness of breath, sore throat, and a positive SARS-CoV-2 rtPCR test 2.) COVID-19 Hospitalization was defined as confirmed hospitalization due to COVID-19, and 3.) Symptoms Severity of COVID-19 defined as symptoms severity of COVID-19 using Brescia-COVID Respiratory Severity Scale (BCRSS).

[0305] All subjects were tested and found to be positive for SARS-CoV-2 infection. All subjects were monitored for one month after the initiation of the therapy. 3 of 50 subjects in the nilutamide arm were admitted to the hospital after their first visit. The patients BCRSS score was 1.3. 8 of 40 subjects in the standard care group were admitted to the hospital with an average BCRSS score of 4.0.

Example 17

[0306] A controlled study was conducted on 16 male patients with average age of 64 years old. Patients were diagnosed with SARS-CoV-2 infection but were showing relatively mild symptoms. Patients were divided into one of two arms. The treatment arm received docetaxel 75 mg/m² IV over 1 hour at the start of the trial, the control arm received standard care. Patients were instructed to go home but return to the hospital if symptoms became worse. Efficacy parameters were defined as 1.) COVID-19 Diagnosis: COVID-19 positive diagnosis was defined as subject exhibiting symptoms of acute respiratory infection, defined as one or more of the following cough, fever ($>37.5^{\circ}\text{C}/99.5^{\circ}\text{F}$), shortness of breath, sore throat, and a positive SARS-CoV-2 rtPCR test 2.) COVID-19 Hospitalization defined as confirmed hospitalization due to COVID-19, and 3.) Symptoms Severity of COVID-19 was defined as symptoms severity of COVID-19 using Brescia-COVID Respiratory Severity Scale (BCRSS).

[0307] All subjects were tested and found to be positive for SARS-CoV-2 infection. All subjects were monitored for

one month after the initiation of the therapy. 0 of 8 subjects in the docetaxel arm were admitted to the hospital after their first visit. 2 of 8 subjects in the standard care group were admitted to the hospital with an average BCRSS score of 4.5.

[0308] It should be noted that the dosage used in administering embodiments of the compositions can be low and still be effective. A low dosage can be within a range from $\frac{1}{10}\times$ to $1\times$ of the following exemplary dosages listed:

topical skin application of finasteride at 10% (w/w)

oral finasteride at 0.1-10 mg

dutasteride at 0.1 mg/day to 1.0 mg/day

degarelix at 240 mg

oral cannabidiol at 10/mg/Kg/day

oral flutamide at 750 mg/day

enzalutamide at 160 mg qd

oral dutasteride at 0.25 mg/day

apalutamide at 60 mg 4 times per day

injection of cyproterone acetate (300 mg).

subcutaneous injection of degarelix (120 mg)

bicalutamide at 50 mg per day

subcutaneous injection of degarelix (120 mg)

oral darolutamide at 300 mg twice daily

abiraterone at 500 mg twice daily

oral nilutamide at 300 mg once daily

docetaxel at 75 mg/m² IV over 1 hour

[0309] However, dosages within a range from $\frac{1}{10}\times$ to $3\times$ of the above identified dosages can be used. Thus, dosages can be within a range from:

topical skin application of finasteride at 1-30% (w/w)

oral finasteride at 0.01-30 mg

dutasteride at 0.1 mg/day to 3.0 mg/day

degarelix at 24 mg-720 mg

oral cannabidiol at 1-30/mg/Kg/day

oral flutamide at 75-2,250 mg/day

enzalutamide at 16-480 mg qd

oral dutasteride at 0.025-0.75 mg/day

apalutamide at 6-180 mg 4 times per day

injection of cyproterone acetate (30-900 mg).

subcutaneous injection of degarelix (12-360 mg)

bicalutamide at 5-150 mg per day

subcutaneous injection of degarelix (12-360 mg)

oral darolutamide at 30-900 mg twice daily

abiraterone at 50-1500 mg twice daily

oral nilutamide at 30-900 mg once daily

docetaxel at 7.5-225 mg/m² IV over 1 hour

1. A composition for treatment of a viral respiratory infection by reducing viral entry in a lung, the composition comprising any one or combination of:

an androgen receptor antagonists or an anti-androgen, wherein the androgen receptor antagonists or the anti-androgen blocks production of proteins in the lung via decreasing an amount of TMPRSS2 expression;

an androgen synthesis inhibitor;

an agent that counters the effect of androgens;

a globulin (SHBG) stimulator;

an antigonadotropin;

a mineralocorticoid to suppress androgen production in the adrenal gland;

a glucocorticoid to suppress androgen production in the adrenal gland;

an insulin sensitizing medication; and

a vaccine or an immunogen against androstenedione that reduces the level of testosterone or increases estrogen.